

EXHIBIT A

LTE Wireless, Inc.

Suspicious Provider Brief – Jan. 2021



BACKGROUND

Several voice service providers advised the Industry Traceback Group (ITG) of ongoing suspicious traffic having the characteristics of illegal traffic pumping. The traffic was directed to telephone numbers assigned to LTE Wireless. Traffic was initially observed in September 2020. Subsequently, other providers observed similar traffic.

Based on the information gathered from the numerous affected providers, LTE Wireless, in coordination with other parties, appears to be undertaking an aggressive, unlawful traffic pumping scheme by fraudulently generating usage minutes across multiple networks for telephone numbers served by LTE Wireless for the purpose of collecting excessive terminating access revenues. Additionally, LTE Wireless and its partners appear to rely on hacked calling facilities to generate the high volume of unlawful traffic. This type of pernicious scheme harms providers and institutions of all sizes, by potentially causing congestion across telecommunications facilities, and preventing legitimate incoming and outgoing calls from reaching consumers, healthcare providers, government officials and more.

HOW IT WORKS

Several steps are involved in the chain that propagates the fraud.

- 1) A hacker anywhere in the world signs up with Kappa Premium Telecom, based in India, and is assigned one or more USA telephone numbers. Providers have evidence of such hackers being based in Pakistan, Palestine, and elsewhere.
- 2) The hacker pushes call traffic to those number(s). This is usually done by hacking into USA-based private switches (i.e., PBXs) over the internet and causing the PBX (via call-forwarding or Direct Inward Station Access) to place calls to those numbers.
- 3) The service provider serving the PBX owner completes each call by first looking up the destination number, which reveals its assignment to LTE Wireless. Most service providers are not directly connected to LTE Wireless, so they send the call to a downstream provider to complete the call, incurring a per-minute fee.
- 4) The downstream provider may also not have a direct connection to LTE Wireless, so it sends the call to yet another downstream provider (paying a fee slightly lower than what they charge their upstream provider customer). This process may repeat until the call is terminated with LTE Wireless.
- 5) Eventually, a provider with a direct connection to LTE Wireless hands the call to them, in this case paying LTE Wireless a per-minute fee.
- 6) At regular intervals, LTE Wireless tallies the minutes of traffic and, presumably, shares a fraction of the revenue received to Kappa Premium Telecom.
- 7) Kappa Premium, per their Facebook and web documents, pays a fraction of its share of revenues to the hacker(s) from step 1.

- 8) Some intermediate providers, that have restricted traffic to LTE Wireless, have received from LTE Wireless offers of direct connection and threats of complaints to regulators if calls are not completed. As a result, there may be limited, if any, intermediate providers that are registered per the FCC's rural call completion rules available to complete an LTE Wireless call.

ABOUT LTE WIRELESS

LTE Wireless has [FCC 499A Filer ID 832719](#). The last filing date is April 2019 (delinquent). They list their HQ address as 3916 N Potsdam Avenue, suite 1061, Sioux Falls, SD 57104. 3916 N Potsdam is the address of [Dakota Post](#), a virtual mailbox service.

The same address is used for LTE Wireless' CEO, shavkat ILYA, and "Chairman or other officer," james tony. (Capitalization is as it appears in the filing). The filing indicates LTE Wireless provides service in Montana, New York, North Dakota, Oregon, South Dakota, Utah, Vermont, and Washington.

The FCC CORES Database has ID #0027632058 and lists Patrick Hardy as Manager with the same 3916 N. Potsdam address.

Both the 499A entry and CORES list the contact phone number as (877) 388-2232. The RespOrg for this number is currently Alcazar Networks. When called, it connects to an IVR for LTE Wireless with extensive menu options. We have not managed to reach a live person despite our efforts to do so.



In June of 2020, [FCC WCB PPD rejected an LTE Wireless Tariff filing](#) for benchmarking and dispute resolution defects. It appears that LTE has no valid federal access tariff. They do have a New York tariff (see below).

South Dakota: [Appl for Cert of Authority to Provide Local Exchange Telecommunications Services Response to SD PUC Data Request](#)

Here they list Dennis Morris, Vice President of Operations, and then correct that name to Dennis Morrissey. They indicate that Robert Casey is no longer with the company. They list their "correct address" as 5421 W 41st Street, Suite 202, Sioux Falls, SD. This is (or was) the address of Heartland Tax, a tax preparer in Sioux Falls. Email addresses include infoltewireless@gmail.com and info@ltewireless.com.

[OpenCorporates Page](#) (with links to other states). This lists an address of 326 N Madison Ave, Pierre, SD 57501, which appears to be a residence.

Washington: [Petition for Registration was deemed incomplete.](#)

New York: [NY DPS Docket](#) regarding LTE Wireless application with documents. Lists Dana Hoyle as Regulatory Consultant; hoyleregaffairs@gmail.com. Includes NY Access Tariff.

[Verizon Submission for Approval of Interconnect Agreement w/ LTE Wireless](#) to NY PSC

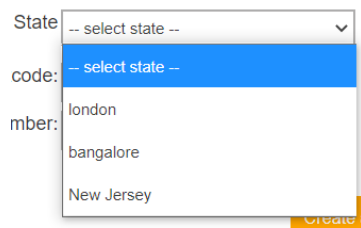
[This earlier \(2018\) Application for CPCN](#) lists Patrick Hardy with phone 214-980-8088 and business address 933 Pennsylvania Av, Brooklyn, NY 11207. Here is a [curious Google Maps photo](#) of that street address.

The [LTE Wireless website](#) oddly promotes both wireless and wireline service packages for residential and business services, but with offers that seem nonsensical. For example, LTE Wireless offers “Unlimited talk, text and video on LTE wireless network worldwide” for \$10/month which is extremely low based on industry standards. On the other hand, LTE Wireless advertises a business calling package for 12 cents per minute, which is highly expensive.

The LTE Wireless website also appears to be non-functional. Many of the links redirect the viewer back to the home page.

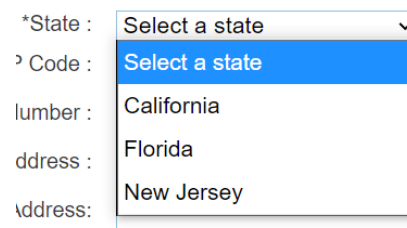
Additionally, the state drop-down lists included in the online forms are mysterious:

On the [Register](#) page:



A screenshot of a web form on the Register page. It shows a state drop-down menu with the following options: "-- select state --", "london", "bangalore", and "New Jersey". The "london" option is currently selected and highlighted in blue. Below the menu is a "Create" button.

On the [Business and Residential](#) pages:



A screenshot of a web form on the Business and Residential pages. It shows a state drop-down menu with the following options: "Select a state", "California", "Florida", and "New Jersey". The "Select a state" option is currently selected and highlighted in blue.

TRAFFIC ROUTING

As noted above, few providers have direct connections with LTE Wireless. Providers route traffic through other providers and eventually it finds its way to LTE.

LTE's entries in the LERG for its NPA-NXX's appear to be out of compliance with regulations. For example, their New York NPA-NXX's show switches in Montana and South Dakota (rather than within the proper New York LATA and rate center). It has also been noted that LTE apparently lacks active local interconnections and interconnection agreements (ICAs) with all relevant RBOCs and ILECs in each of LTE Wireless's eleven LATAs.

Two providers appear to have direct connections: TelxMedia and LCR Hub, but we have not spoken with these providers about this matter. The affected voice service providers that have informed this letter route call traffic through other downstream providers and eventually to LTE Wireless, but still incur charges from LTE Wireless for usage minutes once the calls have been terminated.

LTE Wireless has aggressively sent letters to some providers complaining about the failure to interconnect and threatening legal action; however, when challenged, LTE Wireless has apparently backed down.

Individual providers in some cases have seen millions of minutes of traffic per day, amounting to hundreds of thousands of dollars per month at a wholesale rate of \$0.005/minute. Further, we understand that calls to LTE Wireless continue nonstop, including on Thanksgiving Day, imposing significant costs on providers and their customers – and significant fraudulent gains for the perpetrators. Retail losses could be much higher.

TelxMedia

TelxMedia is one provider that appears to interconnect directly to LTE Wireless. New York-based TelxMedia is run by Faizal Hassad, who has been involved in past litigation with providers. TelxMedia's expired (April 2019) 499A filing is [here](#). TelxMedia does not appear to have a valid filing with New York – following is information taken from the NY PSC:

Case Number: [16-C-0534](#)

Matter Type: Petition

Matter Subtype: Designation as an Eligible Telecommunications Carrier

Matter Title: Petition of Telxmedia, Inc. for Designation as an Eligible Telecommunications Carrier.

Description/Purpose of Filing: Request to Withdraw the ETC Petition

Company/Organization: Telxmedia, Inc.

Response To Previous Filing: No

Filing Date: 12/21/2016

Document(s) Filed:

Document Title	Document Type	Security	File Name	File Size
Request to Withdraw the ETC Petition	Petitions	Public	Telxmedia Withdrawal.pdf	76 KB

TelxMedia is NOT listed in the FCC's Intermediate Provider Registry.

The [TelxMedia web site](#) resembles the LTE Wireless web site.

LCR Hub

LCR Hub is another provider that appears to connect directly to LTE Wireless. Its [website](#) lists a variety of tandem services but gives little detail about the company itself.

We have not found LCR Hub in the 499A filer database. LCR Hub is listed in the FCC's Intermediate Provider registry and is included in the [FCC CORES database. The IPD lists Denis Moris as the contact with an address of 25 First Ave SW Watertown SD 57201.](#)

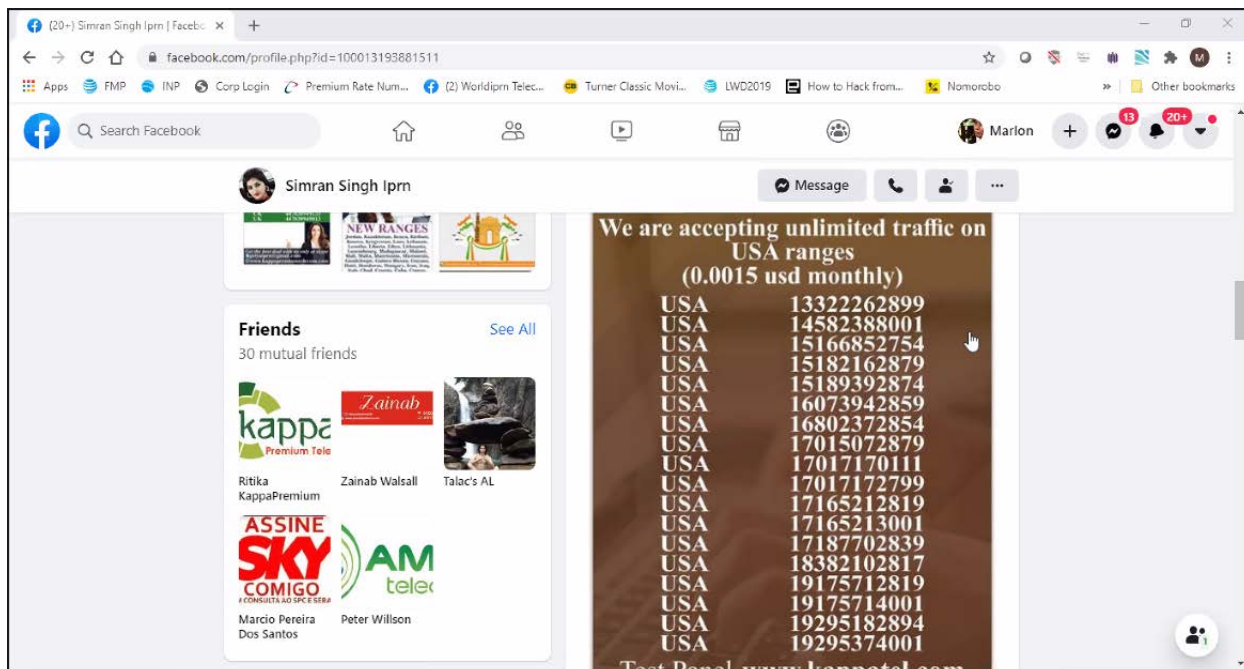
Kappa Premium Telecom

This India-based company sells "premium rate numbers" from around the globe. These are akin to old 900 and 976 numbers in the USA, where the calling party is charged a premium to connect to some added-value service (e.g. news and information, horoscope, dial-a-prayer, audio porn, etc.). These numbers have historically been used in "pumping" schemes where callers unwittingly call the numbers, which incur huge charges for the caller and net a big payoff for those running and facilitating the number schemes.

Generally, providers make best efforts to block calls to traditional premium rate numbers.

However, because the numbers used for the LTE Wireless schemes are otherwise conventional USA geographic numbers – largely based in New York, it is more difficult for providers to quickly identify them as fraudulent, making it easier for bad actors to pump huge numbers of minutes and incur exorbitant charges to them before the provider is able to identify the fraud pattern.

Following is a Facebook ad in which Kappa Premium Telecom promotes its USA numbers; these numbers are serviced by LTE Wireless (as indicated in the Number Portability database):



Here is the URL for this page: <https://www.facebook.com/people/Simran-Singh-Iprn/100013193881511>

Kappa's [website](#) explains more about its business and explicitly indicates that its numbers are not to be used fraudulently, but the rest of the site appears questionable. For instance, a [recent post](#) in the site's News section highlights the availability of USA numbers that will earn the operator money. When dialed, these numbers connect to an IVR that offers the ability to listen to various radio stations for an apparently limitless period (all the while racking up per-minute charges and payouts).

PROVIDER ACTIONS

As an increasing number of voice service providers have brought this scheme to light, originating providers have begun to more proactively monitor their networks for unusual traffic patterns associated with LTE Wireless OCNs, and address the traffic with its source. For example, one provider might recognize a suspected PBX hack and address it urgently with the affected PBX owner. Originating providers have also considered rejecting LTE Wireless calls from a PBX as part of a fraud-prevention service offered to PBX operators. With this scheme, providers are in a difficult position: At best, it is unclear whether they are permitted to block the call under the FCC's access stimulation, rural call completion, and robocall blocking rules, and therefore some providers may feel they have no choice but to pay terminating access charges for the unlawful traffic. For those intermediate providers with contracts that do not require termination to all destinations, some have ceased offering LTE Wireless destinations to their upstream customers.

As of December 2020, millions of apparently fraudulent minutes continue to be directed to LTE Wireless. Traffic statistics suggest that traffic has surged on certain providers' networks, and moves to customers of other providers once those providers have taken steps to mitigate, such as notifying their customers that their PBX facilities have been hacked. Those customers suffer until the issue is addressed by the provider; once that occurs, the fraudsters and traffic move to the next set of customers and providers.

The providers participating in our conversations have not shared complete details about specific steps taken or the traffic patterns they have observed to date, so the ITG cannot provide a comprehensive explanation; however, the affected providers have generously shared other information, including relevant web resources, call history, regulatory and legal requirements, that has allowed the ITG to compile this report.

TENTATIVE CONCLUSIONS

LTE Wireless appears to be running a sophisticated telecommunications fraud scheme, taking advantage of regulatory loopholes and limited oversight to bilk providers and their customers out of millions of dollars. The scheme encourages fraudsters around the globe to break into private telecom systems and tie up capacity, such that legitimate and perhaps critical traffic could be blocked.

LTE Wireless is belligerent with providers, trying to intimidate them with threats of regulatory and legal action if those providers do not interconnect with LTE Wireless, send LTE Wireless traffic, and/or pay LTE Wireless.

Given what we know about Least Cost Routers' traffic, we believe they are required to file as an Access Stimulator but have not done so. It is incumbent on them to file when their ratio of terminating traffic to originating traffic exceeds 6:1. They would also have to identify a tandem provider and pay the associated costs.

Providers TelxMedia and LCR Hub appear to be cooperating with and facilitating LTE Wireless' scheme, despite maintaining an arms-length distance at least on the surface.

Kappa Premium Telecom plays an important role in recruiting "customers" for the premium rate numbers, who sign up for number assignments and then use whatever techniques available to drive traffic to those numbers. Investigations by originating providers have generally indicated that the bulk of calls come from USA-based hacked PBXs, but the IP addresses involved suggest foreign perpetrators are in fact making the calls through the USA-hacked PBXs.

Appendix – OCNs assigned to LTE Wireless

OCN	NPA-NXX's, City, State (LATA)
323J – SD	None Found
335J – MT	None Found
379J – OR	458-238-A, Bandon, OR (670)
379K	None Found
410J – ND (both LATAs)	701-507-A, Rolette, ND (638) 701-717-A, Carrington, ND (636)
452J – NY (covers all NY LATAs except Fishers Island/921 and Rochester 974)	332-224-A, NYC Zone 1, NY (132) 332-226-A, NYC Zone 1, NY (132) 347-540-A, NYC Zone 12, NY (132) 347-550-A, NYC Zone 12, NY (132) 516-685-A, Cold Spring Harbor, NY (132) 607-394-A, Addison, NY (138) 631-550-A, Yaphank, NY (132) 646-550-A, NYC Zone 1, NY (132) 680-237-A, Adams, NY (136) 716-521-A, Akron, NY (140) 718-970-2/3/4/9, NYC Zone 12, NY (132) 838-210-A, Millerton, NY (134) 845-550-A, Woodstock, NY (133) 845-696-A, Amenia, NY (133) 914-550-A (Chappaqua, NY) (132) 917-550-A (NYC Zone 1) (132) 917-571-A (NYC Zone 1) (132) 928-518-A (NYC Zone 3) (132) 929-537-A (NYC Zone 3) (132)
460J – IA (644 is Omaha, NE LATA)	712-361-A, Scranton, IA (644) 712-598-A, Odebolt, IA (630)
484A LTE Comms Svcs dba Telecom Affiliates – CO (not LTE Wireless)	None Found